

COUNTY OF YORK

MEMORANDUM

DATE: April 6, 2001 (BOS Mtg. 4/17/01)(5/1/01)

TO: York County Board of Supervisors

FROM: James O. McReynolds, County Administrator

SUBJECT: Communications System Upgrade

During the work sessions held on the proposed Capital Improvements Plan (CIP) for Fiscal Years 2000-2005, staff briefed the Board on the status of the County's radio communications system. The approved CIP included funding for a study of communications system and in June of 2000 a contract was issued for this purpose. Subsequent to award of the contract, the County invited the cities of Poquoson and Williamsburg to participate and a joint study was conducted. An independent study had already been performed for James City County. Their study yielded recommendations very similar to the study conducted for the County.

The joint study was recently completed and, during a work session conducted on April 3, 2001, staff provided the Board of Supervisors with a briefing on the conclusions and recommendations. Based on the study results and staff review it is recommended that the County replace its existing communications system for a number of reasons, including:

- Needed improvements in coverage for all radio systems currently in use within the County. These include the systems used by public safety agencies, such as the Department of Fire and Life Safety and the Sheriff's Office; public service agencies, such as the Departments of Environmental and Development Services and General Services; as well as the School Division.
- The need for radio systems interoperability among the various County departments and agencies, including the School Division; as well as the need for radio systems interoperability between certain County agencies (most often public safety agencies) and surrounding localities.
- The age and technology of much of the radio equipment used in the County has exceeded its useful life.
- Radio systems within the County have limited channel capacity, making it difficult to manage multiple and/or complex incidents. Further, problems are experienced with day to day operations because of increased system usage which is well beyond the original design capacity of the system.
- The County currently experiences radio system interference from multiple sources resulting in hampered or poor communications. As a result, radio traffic often must be repeated.
- The current computer-aided dispatch system has been in service for over 15 years with

the exception of an upgrade in the early 1990's. The system is recommended for replacement in order to increase dispatch system efficiency, as well as to further interface with various public safety agency incident based reporting systems, as well as Wireless Phase II needs, including mapping.

- There are increasing needs for mobile data technology for field operations, such as Sheriff's Office patrol officers, which must operate out of their vehicles, as well as Fire and Rescue personnel operating out of fire and EMS apparatus. Mobile data technology can improve dispatching efficiency, incident-based reporting procedures, data transmission for many applications, including criminal records, hazardous materials information, etc., as well as a more secure means of transmitting confidential data.

The study recommends that the County upgrade its communications system to 800 megahertz technology. Of the systems currently available, the industry recognizes the 800 megahertz capability as the standard for public safety. While it is relatively new technology, it has been on the market long enough to be proven and should be supported by the industry for twelve to fifteen years and it is the system chosen by most other local jurisdictions. Hampton, Newport News and James City County, as well as the five major jurisdictions in South Hampton Roads, have already committed to this technology.

In addition to replacing the communications system the study recommends a regional system. A regional system will permit the sharing of design costs and certain facilities and equipment, such as towers needed near the boundaries with other jurisdictions. This should significantly reduce the cost for each jurisdiction and provide much-needed back up in the case of system malfunctions.

A drawback of agreeing to a regional system is, should the County decide not to continue with the implementation of the system, it could have an impact on the other regional participants. However, given the need to upgrade the County's current system and the benefits of a regional system I believe the County should proceed in partnership with James City County and, hopefully, Poquoson. If the Board supports the funding plan outlined during the April 3, 2001 work session I am confident the new communications system can be installed over the course of the next several years.

There is an un-obligated balance of approximately \$10,000 from the original appropriation for the study and it is recommended that this amount be applied to the design stage (Phase II) of the Communications System Upgrade Project. Resolution R01-79 requests that the Board of Supervisors appropriate \$90,000 (County's share of design, \$100,000, less balance in the study account, \$10,000) from the contingency reserve for Phase II. Phase II will include the employment of a firm to begin the design process and acquisition process management jointly with James City County and potentially with the City of Poquoson for an upgraded communications system. The actual procurement resolution for the firm selected to conduct the Phase II process will be brought back to the Board of Supervisors at the appropriate time, in conjunction with James City County.

Based on the Phase I study results and the opportunity for development of a cooperative regional radio system, I recommend approval of Resolution R01-79 to authorize the expenditure of up to \$90,000 from the Contingency Reserve for Phase II of the joint radio communications upgrade project and to authorize the County Administrator to procure the services necessary for this phase.

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Attachments